ancillary systems periodically, and allocate just a small part of their annual expense budget to purchase such systems. Accordingly, such businesses can better afford the disruption of the loss of the spectrum for these ancillary services than can a company whose business is the use of spectrum to offer public service.

Further, if there is a choice between licensed and unlicensed spectrum, unlicensed spectrum should be preferred as its users have a lesser expectation of a continuing access to the frequencies.³⁰

In addition, spectrum already subject to consideration for reallocation in the advanced wireless proceeding should be preferred over spectrum that is foreign to the proceeding. As a result, the existing record in the proceeding becomes more useful, the need to issue further notices of proposed rule making is eliminated, the pronounced negative effect caused by this

§15.5 General conditions of operation.

- (a) Persons operating intentional or unintentional radiators shall not be deemed to have any vested or recognizable right to continued use of any given frequency by virtue of prior registration or certification of equipment, or, for power line carrier systems, on the basis of prior notification of use pursuant to \$90.63(g) of this chapter.
- (b) Operation of an intentional, unintentional, or incidental radiator is subject to the conditions that no harmful interference is caused and that interference must be accepted that may be caused by the operation of an authorized radio station, by another intentional or unintentional radiator, by industrial, scientific and medical (ISM) equipment, or by an incidental radiator.
- (c) The operator of a radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference. Operation shall not resume until the condition causing the harmful interference has been corrected.

In looking for such spectrum, the Commission should prefer spectrum that has uses that are isolated geographically (e.g., in-building services), as opposed to spectrum that is widely used in the United States.

Rule 15.5, governing the operation of Part 15 unlicensed radiators, states, in pertinent part:

proceeding on businesses that use the spectrum subject to potential reallocation is lessened, and the proceeding is not cluttered with new constituencies and their unique political and economic interests. Consequently, the reallocation process is accelerated and simplified, thereby offering certainty to spectrum users earlier.

The Commission should prefer replacement spectrum that can be reallocated without causing a break in a band of spectrum that more efficiently is used as a continuous band of spectrum.

Finally, the preferable replacement spectrum should be that which is not best suited to large capacity advanced wireless services.

IV. A REVIEW OF THE FEASIBILITY OF ACCOMMODATING REALLOCATED MDS CHANNELS 1, 2 AND 2A IN THE BANDS ALREADY SUBJECT TO CONSIDERATION IN THE ADVANCED WIRELESS SERVICES PROCEEDING

As explained above, the need to rapidly conclude this rule making proceeding, coupled with other practical considerations, makes it prudent to look solely to bands already in play in this proceeding as possible homes for displaced MDS channel 1, 2 and 2A licensees. The Commission has identified the following bands as candidates for reallocation: the 1990-2025, 2165-2200, 2110-2150, 2390-2400, 1710-1755, 1770-1850 and 1910-1930 MHz bands. The ability of those bands to accommodate displaced MDS channels 1, 2 and 2A, consistent with the considerations described above, is discussed below in this Section IV.

1. 1990-2025 and 2165-2200 MHz. The 1990-2025 and 2165-2200 MHz bands were just licensed three months ago to Mobile-satellite Service providers after a long proceeding. While one might question the feasibility of some of their business plans, the fact remains that these licensees have not had any time to implement their systems or prove their ability to make publicly beneficial use of the frequencies licensed to them.

- 2. <u>2110-2150 MHz</u>. This band, along with the 20 MHz between 2150 and 2170 MHz which includes MDS channels 1, 2 and 2A, is one of just 2 bands recently identified by NTIA in the *NTIA Statement* as a principal candidate for reallocation for advanced wireless services. It would make little sense, if any, to reallocate a portion of this band to MDS channels 1, 2 and 2A while taking the 2150-2162 MHz portion of this band away from MDS channels 1, 2 and 2A.
- 3. 2390-2400 MHz. This band is not a preferred relocation band for MDS channels 1, 2 and 2A for several reasons. First, it is much higher in frequency than MDS channels 1, 2 and 2A. Second, its 10 MHz of bandwidth would not be large enough to accommodate the 12 MHz of bandwidth now used by MDS channels 1 and 2. Third, as explained below, this band should be retained for unlicensed PCS operations.³¹
- 4. <u>1710-1755 MHz</u>. This band, along with the 15 MHz between 1755 and 1770 MHz is the other of the 2 bands recently identified by NTIA in the *NTIA Statement* as a principal candidate for reallocation for advanced wireless services. If it makes sense to allocate 60 MHz of bandwidth from 2110-2170 MHz for advanced wireless services, then a paired band of equal size would be required. As the 1710-1770 MHz band is of that size, taking spectrum from it for displaced MDS would not make sense, any more than it would make sense to take spectrum for this purpose from the 2110-2170 MHz band.
- 5. 1770-1850 MHz. This band is used by the Defense Department for combat and other mission critical defense purposes. Given recent events, it is not in the National interest to dislodge these frequencies from the Department of Defense, and, for that unstated but obvious reason, the NTIA Statement concludes that the "1770 to 1850 MHz band is not a part of this assessment."

See Section V.B., below.

NTIA Statement, at 1.

6. 1910-1930 MHz. Of the Commission-identified bands, this band appears to be the only band that can accommodate MDS channels 1, 2 and 2A consistent with the foregoing considerations, as explained below in Section V.

V. THE 1910-1930 MHZ BAND IS THE PREFERRED BAND TO ACCOMMODATE REALLOCATED MDS CHANNELS 1, 2 AND 2A

In the *FNPRM*, the Commission asks for "comment on whether some or all of the 1910-1930 MHz band should be reallocated for new advanced wireless services use or for incumbents displaced by advanced wireless services.³³ This band presently is allocated for unlicensed PCS, and is lightly used. In view of the foregoing considerations, including the lack of another preferable relocation band already subject to reallocation in the 3G rule makings, a reallocation of MDS channel 1, 2 and 2A operations and licenses to the 1910-1930 MHz band would be in the public interest.

This band offers many of the benefits now enjoyed by MDS channels 1, 2 and 2A at 2150-2162 MHz, satisfies best the concerns discussed above and meets the guidelines for replacement spectrum location suggested above. The remainder of this Section explains that conclusion.

A. The Band Meets the Frequency Location Need.

The 1910-1930 MHz band is not higher in frequency than the present MDS channel 1, 2 and 2A frequency allocation. Consequently, it could serve as a new home for MDS channels 1, 2 and 2A without risking a diminution of the rural service or overall consumer service capability of MDS/ITFS-based broadband fixed wireless, without (1) risking an increase in base station equipment costs, (2) without risking an increase in CPE costs, (3) without causing any incompatibility between the use of MDS channels 1, 2 and 2A with the MDS/ITFS channels

FNPRM, at \P 11.

between 2500 and 2690 MHz, and (4) without impairing the willingness of equipment manufacturers to develop and produce the equipment essential for such services to satisfy consumer demand.

B. The Band Is Lightly Used, and Its Existing Users Can Be Easily Accommodated In Previously Allocated Spectrum.

The 1910-1930 MHz band is little used. As stated in the *FNPRM*, "[t]here has been little development of unlicensed asynchronous devices in the 1910-1920 MHz and 2390-2400 MHz bands, and only limited wireless PBX use has begun in the 1920-1930 MHz segment." Importantly, any dislocation of existing uses from this band should not have any impact upon the household consumer of communications services, because they would not be expected to purchase unlicensed PCS systems.

As a result, current users (if any) of the 1910-1920 MHz segment can be shifted to the 2390-2400 MHz band, which is now allocated for the same type of use but little used.³⁵ In addition, isochronous use of the 1920-1930 MHz band can be shifted to the 2390-2400 MHz band.³⁶ Given the light use of the 20 MHz between 1910 and 1930 for unlicensed PCS, there appears to be no reason that the lightly used 10 MHz between 2390 and 2400 MHz cannot accommodate those operations and future operations.³⁷

Ad Hoc understands that the existing uses of the 1910-1930 MHz band are almost all very low power, in-building systems, which would not be expected to produce more than

FNPRM, at \P 10.

Id

While the 2390-2400 MHz band is currently limited to asynchronous devices, there is a petition subject to the *FNPRM* providing the procedural vehicle for allowing the isochronous use of the 1920-1930 MHz band. Petition for Rule Making of the Wireless Information Networks Forum Concerning the Unlicensed Personal Communications Service, RM-9498 (filed Jan. 8, 1999); *sæ FNPRM*, at ¶¶ 9-13.

negligible radiation far outside of the host building. These facts will ease the transition of these systems to the 2390-2400 MHz band, as it is expected that to some extent the uses of the 1910-1930 MHz band by MDS can be designed around in-building unlicensed PCS operations during the transition period.

C. The Band Is Used by Companies Who Use It in Support of Their Non-Communication Businesses.

Because of the essential nature of the unlicensed PCS, the 1910-1930 MHz band is used primarily (if not exclusively) by companies who see it not as their business but as a means to support their businesses. Accordingly, the disruption of moving to new spectrum is a secondary financial burden to these companies.

D. The Band Is Unlicensed, Thus Eliminating Any Expectancy of Its Continued Availability to Incumbents.

The 1910-1930 MHz band is made available on an unlicensed basis under Part 15 of the Commission's Rules. Accordingly, there is no expectancy of continued use of this band, as stated in Rule 15.5, entitled "General conditions of operation." As a result the users of this band can be removed from it without first surpassing the great legal hurdles that would be present if the users of this band held licenses. 39

E. The Band Is Already Subject to Consideration for Reallocation in This Proceeding.

The 1910-1930 band was identified for a potential home for advanced wireless services in the *FNPRM*.⁴⁰ Insofar as one might question the feasibility of this small 20 MHz for that purpose, the Commission has nonetheless placed users of this band on notice that it may be

³⁹ Sæ, e.g., 47 U.S.C. § 316.

It is notable that 6 years has elapsed since the proponents of the then non-existent unlicensed PCS concept convinced the Commission that there would be a substantial market for unlicensed PCS products. Time proves them wrong.

This rule (with the exception of its subsection (d)), is reproduced in footnote 30, supra.

reallocated "for incumbents displaced by advanced wireless services." Consequently, a reallocation of MDS channels 1, 2 and 2A to this band will not require another notice of proposed rule making, the delay consequent to the creation of such a document and consideration of responsive comments, or the further negative impact on MDS interests of additional in concluding this proceeding.

F. The Band Provides Sufficient Bandwidth for MDS Channels 1, 2 and 2A, Obviating the Need to Reallocate These Channels to Two or More Different Bands and the Need to Breakup a Band Allocated to Another Service.

The 1910-1930 offers 20 MHz of bandwidth, assuming that there are no adjacent band restrictions. That is the only discrete band included within the 3G rule making that is at least as large as MDS channels 1 and 2 (12 MHz) but not large enough to satisfy expressed 3G needs.⁴² Thus, the use of the 1910-1930 MHz band as displacement spectrum for MDS channels 1, 2 and 2A would not require the Commission to either place those channels on frequencies that are separated from one another, or on frequencies that disrupt a continuous band otherwise useful for an alternative single service.

G. The Band Lacks the Size Sought for 3G Services.

The 1910-1930 MHz band is only 20 MHz of bandwidth. In contrast, commentators and the ITU have predicted that as much as 160 MHz of additional spectrum – or 8 times the 1910-1930 MHz allocation -- will be needed to meet 3G requirements.⁴³ Ad Hoc will not quarrel with that prediction, other than to note that such a prediction is speculation to some extent. Nonetheless, it is worth noting the great difference between the predictions of 3G spectrum

FNPRM, at \P 11.

⁴¹ *Id.*

See Section V.G., below.

⁴³ A dranced Wireless NPRM, at ¶ 26.

needs offered by mobile services interests and the ITU, and the bandwidth available between 1910 and 1930 MHz.

Even assuming arguendo that the 1910-1930 MHz band would provide sufficient bandwidth for 3G services, it is difficult to understand how this band could be segmented into symmetrical pairs that would avoid mutual interference without the use of expensive filtering. Presently, the broadband PCS allocations are separated by between 65 and 75 MHz. Assuming that 5 MHz of bandwidth in each direction is sufficient to offer 3G services, the 1910-1930 MHz band could be segmented into two blocks, each having two 5 MHz channel pairs. But, the spectral separation between pairs in a block could only be 5 MHz, which is between 1/13th and 1/15th of the size of the separation of the channel pairs within the broadband PCS blocks. Slightly larger spectral separation between pairs in a block can be achieved only by decreasing the size of symmetrical channel pairs (for example, three blocks of 3.33 MHz channel pairs can be separated by 6.66 MHz). Still, there is no way to locate all band pairs within the 1910-1930 MHz band and also achieve a spectral separation between paired subbands that even remotely approaches that available to broadband PCS licensees.

Accordingly, to make mobile devices affordable, it would seems that the 1910-1930 MHz band could not serve as a 3G home without locating another 20 MHz block of spectrum for paring purposes, and there is no spectrum of comparable size anywhere near 1910-1930 MHz. The frequencies between 1910 and 1850 MHz are not available as they are used for broadband

A: 1850-1865; 1930-1945

B: 1870-1885; 1950-1965

C: 1895-1910; 1975-1990

D: 1865-1870; 1945-1950

E: 1885-1890; 1965-1970

F: 1890-1895; 1970-1975

See Rule 24.229. The broadband PCS allocations (in MHz) are:

PCS services (which also can offer advanced wireless services). Continuing down in frequency, there is a Federal government allocation running from 1850 to 1770 MHz which the NTIA Statement says will not be used for advanced wireless services. Looking up in frequency, the frequencies between 1930 and 1990 MHz are not available as they are used for broadband PCS services along with the 1850-1910 MHz segment. Following the 1990 MHz PCS border is 35 MHz just recently allocated to MSS and, hence, unavailable. In short, there is no sensible and efficient way to make the 1910-1930 MHz band useful for advanced wireless services.

VI. SERVICE RULES FOR REALLOCATED MDS CHANNELS 1, 2 AND 2A

A. Bandwidth; Guard Bands or Coordination Zones.

Ad Hoc recognizes that MDS channels 1 and 2 have, collectively, 12 MHz of bandwidth while a reallocation of these channels to the unlicensed PCS band at 1910-1930 MHz would allow these channels 20 MHz of collective bandwidth. But finding an equivalent amount of bandwidth is of little importance in this reallocation exercise. Seeing that MDS Channels 1 and 2 are not punished is perhaps of greater importance, as is enabling manufacturers that have produced equipment designed for at least 12 MHz of bandwidth to continue with such designs rather than to reconfigure designs for smaller amounts of bandwidth.

While one might ask how the additional bandwidth might be otherwise deployed, the amount of the additional bandwidth on first blush appears greater than in reality it is. By reallocating the 1910-1930 MHz band to MDS channels 1 and 2, the Commission is placing high power operations immediately adjacent to much lower power operations. While PCS operations may be conducted at up to 1,640 watts E.I.R.P.,⁴⁵ in practice PCS base stations tend to operate at

⁴⁵ Rule 24.232.

much lower powers and PCS mobile stations are limited to 2 watts E.I.R.P. ⁴⁶ In contrast, MDS stations may operate at up to 2,000 watts E.I.R.P. To coordinate these disparate power levels and uses, it would seem appropriate to dedicate a portion of the band edge of the reallocated MDS channels 1 and 2 to guard bands or to restrict the powers, frequency stabilities and emission masks employed in that portion at band edge to avoid interference to PCS outside of the band. Obviously, the latter solution is preferable because it is better than the fallow spectrum that defines a guard band. But, in either case, the fact is that the reallocated MDS channels will not truly enjoy a material increase in their spectrum allocation because of the need to protect adjacent band PCS uses.

B. Permissible Services.

Presently, MDS stations are used for a wide variety of purposes, including the transmission of video entertainment and news programming, and the transmission of broadband communications. Just recently, at Ad Hoc's suggestion,⁴⁷ the Commission added a mobile allocation to the MDS and ITFS frequencies between 2500-2690 MHz. As stated repeatedly above, MDS channels 1, 2 and 2A are commonly used with the 2500-2690 MHz MDS and ITFS channels. Indeed, the Rules in Part 21 governing MDS channels in the 2500-2690 MHz band are the same rules that apply to MDS channels 1, 2 and 2A. The Commission's decision to add a mobile allocation to the 2500-2690 MHz band is sound public policy, and the same flexibility should be afforded to MDS channels 1, 2 and 2A, whether or not they are reallocated to different spectrum.

Ad Hoc's request for a mobile allocation was focused primarily on MDS channels 1 and 2. To quote those comments in part:

^{6 1.1}

First R& O, at ¶¶ 18, 19.

"the Commission should focus upon allowing the incumbent licensees to evolve along with technological developments, consistent with the flexible-use concept that has been the hallmark of MDS since its creation in the mid-1970s.

To this end, and to allow the marketplace to better determine the use of MDS Channels 1 & 2, Ad Hoc is in favor of adding mobile and portable services to the authorized uses of MDS Channels 1 and 2, as well as other MDS and ITFS Channels. As a result, the current licensees of MDS Channels 1 & 2 would be able to initiate advanced wireless services in the 2150-2162 MHz band when and as marketplace conditions dictate, subject to technical coordination. This would be in accordance with the *Emerging Technologies* rulemaking, in that the spectrum could be used for new and innovative communications services, while not jeopardizing the ability of the current licensees to continue to provide existing services, and improved advanced services, to the public."

Ad Hoc can envision no practical reason to apply the flexible use policy to 2500-2690 MHz MDS without also applying it to MDS channels 1, 2 and 2A because MDS channels 1, 2 and 2A are inextricably linked in practice to MDS/ITFS operations at 2500-2690 MHz and it would be next to impossible to operate under different service rules.

As a matter of law, there is no reason not to apply the flexible use policy to MDS channels 1, 2 and 2A. As the Commission stated in the *First R&O*, it has statutory authority to provide flexible use authority in any frequency band so long as the following test is met:

- (1) such use is consistent with international agreements to which the United States is a party; and
- (2) the Commission finds, after notice and an opportunity for public comment, that—
 - (A) such an allocation would be in the public interest;
 - (B) such use would not deter investment in communications services and systems, or technological development; and
 - (C) such use would not result in harmful interference among users. 48

Part (1) of the test is met for both the 1910-1930 MHz band and the 2150-2162 MHz band, as both bands are allocated in Region 2 by the International Telecommunications Union

⁴⁸ 47 U.S.C. § 303(y).

for mobile use, as well as fixed use, without restrictions.⁴⁹ While, at present, there is no treaty between Canada or Mexico and the United States concerning the mobile use of those bands, there is no reason to believe that such treaties cannot be negotiated and, in any event, there is no reason to allow the lack of such treaties to restrain United States operations in areas not immediately adjacent to the Canadian or Mexican borders with the United States.

Part (2) of the test requires the Commission to make three separate factual findings.

First, the Commission must find that such an allocation would be in the public interest. Ad Hoc addressed this very issue in its comments submitted in response to the *Advanced Services NPRM*, saying, in part, the following:

[T]o allow the marketplace to better determine the use of MDS Channels 1 & 2, Ad Hoc is in favor of adding mobile and portable services to the authorized uses of MDS Channels 1 and 2, as well as other MDS and ITFS Channels. As a result, the current licensees of MDS Channels 1 & 2 would be able to initiate advanced wireless services in the 2150-2162 MHz band when and as marketplace conditions dictate, subject to technical coordination. This would be in accordance with the *Emerging Technologies* rulemaking, in that the spectrum could be used for new and innovative communications services, while not jeopardizing the ability of the current licensees to continue to provide existing services, and improved advanced services, to the public.

With notebook computers becoming smaller and smaller, and the PDA's and

This allocation is embodied in Rule 2.106. The Region 2 allocation for the 2150-2160 MHz band (which includes MDS channel 1 and all but the upper 2 MHz of MDS channel 2) is Fixed, Mobile and Mobile-satellite (space-to-Earth). This band is subject to just one footnote, which is international footnote \$5.388. This footnote states that the 1885-2025 and 2110-2200 MHz bands are intended for use, on a world-wide basis, for IMT-2000 services, but that such intention does not preclude other uses of those bands. The Region 2 allocation for the 2160-2170 MHz band (which includes the upper 2 MHz of MDS channel 2) is similarly Fixed, Mobile and Mobile-satellite (space-to-Earth). Again, international footnote \$5.388 applies to that band. The remaining footnotes applicable to that band, \$5.389C, \$5.389D, \$5.389E and \$5.390, apply solely to Mobile-satellite operations conducted in that band. The Region 2 allocation for the 1710-1930 MHz band is Fixed and Mobile. Like the other two bands discussed in this footnote, international footnote \$5.388 applies to this band. There are additional footnotes applicable to this band related to aeronautical public correspondence (\$5.380) and radio astronomy (\$5.149, \$5.341, \$5.385, \$5.386 and \$5.387) but these footnotes do not apply to the 1910-1930 MHz portion of the band.

digital cell phones becoming more feature-rich, Ad Hoc believes there will be a blending of the three technologies creating a demand that fixed broadband wireless will address. Of course, this will be an evolutionary process, which is best served by allowing the marketplace to allocate spectrum and by offering the historical cooperation of MDS, MMDS and ITFS channel licensees to support the goal of providing the most advanced services to the public.

* * *

Considering the recent controversy regarding small businesses in the PCS spectrum auctions, simply allowing MDS and ITFS spectrum to be used for 3G services affords the FCC an opportunity to permit small businesses into advanced mobile communications. It is evident that post-IMT-2000, there will be a varied 3G landscape and portfolio of services to be deployed using many different non-exclusive blocks of spectrum, eg, 800MHz, 900MHz, 1900MHz and 2300MHz. Many of these 3G systems will evolve through upgrading of existing system capacity.

Permitting incumbent licensees in the 2150-2162 MHz and 2500-2690 MHz bands to provide 3G services will ensure maximum flexibility in bringing advanced 3G-type service to the public. The MDS licensee or lessee needs to reach agreement with only one channel from any two successive channel groups to deploy a 3G system. This approach also would have the least harmful effect on educators, relative to channel capacity, and would allow potentially BTA-wide coverage including, perhaps, the creation of a nationwide 3G educational network.⁵⁰

Clearly there are significant and tangible expected public benefits from extending flexible use authority to MDS channels 1, 2 and 2A that render such action in the public interest.

Second, the Commission must find that such use would not deter investment in communication services and systems, or technological development. Ad Hoc believes that, as the Commission found for the 2500-2690 MHz band,⁵¹ a flexible allocation will encourage investment in services and systems, as equipment manufacturers and services providers will know that their novel service and equipment ideas will be permissible, and can be brought to market and consumers without first concluding a protracted rule making process that holds the

Ad Hoc Comments to Advanced Services NPRM, at 7-10 (filed Feb. 22, 2001) (footnote omitted)

First R& O, at \P 24.

possibility of thwarting the innovation. As a result, technological development can be expected to accelerate.

Third and finally, the Commission must find that such use would not result in harmful interference among users. Avoiding intra-service interference can be accomplished as it was for the 2500-2690 MHz band by, to quote the Commission, maintaining:

"existing technical rules, including interference rules, ... until a rulemaking proceeding has been completed that will address any changes to those rules that may be necessary. More importantly, we emphasize that until that occurs, any mobile use introduced in this band would be subject to existing technical rules or interference agreements between incumbent users and new mobile users." ⁵²

While reallocating MDS channels 1, 2 and 2A to the 1910-1930 MHz band would require rules governing access by MDS licenses to the spectrum close to the borders of that band,⁵³ the Commission's decision on interference protection for the 2500-2690 MHz band should apply equally to MDS operations in either the 2150-2162 MHz band or 1910-1930 MHz band.

Accordingly, there are compelling practical reasons, as well as legal authority, to confer a flexible allocation upon MDS channels 1, 2 and 2A, whether operated in the 2150-2162 MHz band or 1910-1930 MHz band.

C. Other Technical Rules.

These comments are written to provide the Commission with a set of considerations and recommendations that should influence any decision the Commission makes to displace MDS channels 1, 2 and 2A to alternative spectrum. Consistent with the scope of the 3G rule makings, Ad Hoc is providing information designed to help the Commission preserve MDS services that may be offered by MDS channels 1, 2 and 2A in a displacement band, plus provide those channels with a flexible allocation as is now applied to their counterparts at 2500-2690 MHz. It

⁵² *Id.* at ¶ 26.

See Section VI. A., above.

is, in part, for that reason that Ad Hoc is advocating the relatively close frequency band at 1910-1930 MHz as the displacement spectrum for MDS channels 1, 2 and 2A. Accordingly, Ad Hoc sees no benefit in suggesting or need to create new technical rules, other than adjacent channel interference rules designed to protect broadband PCS operations. But, essential to that conclusion is the relative compatibility of the 1910-1930 MHz band with existing and planned MDS channel 1, 2 and 2A operations. If another band is selected as the displacement band, it is possible that wholly-new technical rules would have to be designed. That would be unfortunate, as it would delay the conclusion of this proceeding, would consume significant Commission and private sector resources, and would ultimately complicate the use of displaced MDS channels 1, 2 and 2A with MDS and ITFS channels in the 2500-2690 MHz band.

With respect to mobile service rules, the mobile service rules for MDS channels 1, 2 and 2A should be developed along with those for the 2500-2690 MHz band.

D. Relocation of Unlicensed PCS Incumbents.

The 1910-1930 MHz band is little used by the primary unlicensed PCS. Accordingly, there are few operators of unlicensed systems in that band that will need to be removed. Insofar as these incumbent operations are not licensed and are strictly ancillary support infrastructure for larger business operations, Ad Hoc supports allowing these systems to continue in operation for a depreciation period, after which they could operate only on a strict noninterference basis to MDS channel 1, 2 and 2A operations. A five year depreciation schedule is supportable, as it is the period of depreciation for such systems employed for Federal taxation based upon notice and comment to the U.S. Congress by interested parties.⁵⁵ That time should run from the date of installation. Moreover, so as not to exacerbate transition problems and to avoid exploitation, the

That said, we recognize the possibility that there may be other interference issues that need to be resolved, but we see no reason why issues of that nature cannot be resolved.

Commission should place an immediate freeze on the installation and use of new unlicensed PCS devices, as well as the modification or expansion of use of existing unlicensed PCS devices, operating in the 1910-1930 MHz band. Prior to the end of a system's depreciation period, an MDS channel 1 or 2 licensee, or a lessee of its channel, should have the right to force the unlicensed system operator to cease operations by either buying the system for its undepreciated value (based on a 5 year depreciation schedule) or retuning it (if possible) to operate in the 2390-2400 MHz band.

E. Relocation of FMS Incumbents.

At present, the 1910-1930 MHz band is also occupied by incumbent fixed Part 101 fixed microwave stations ("FMS"). Rule 101.69 provides, in part, that:

"[i]n the 1910-1930 MHz band allocated for unlicensed PCS, FMS operations will continue to be co-primary until one year after UTAM, Inc. initiates negotiations for relocation of the fixed microwave licensee's operations. Except as provided in paragraph (c) of this section, public safety facilities defined in §101.77 will continue to be co-primary in these bands until three years after the Commission commences acceptance of applications for an emerging technology service (voluntary negotiation period), and until two years after an emerging technology service licensee or an emerging technology unlicensed equipment supplier or representative initiates negotiations for relocation of the fixed microwave licensee's operations (mandatory negotiation period). If no agreement is reached during either the voluntary or mandatory negotiation periods, an ET licensee may initiate involuntary relocation procedures."

That rule is supplemented by other FMS relocation requirements set forth in Rules 101.71, 101.73, 101.75 and 101.77.

To the extent that FMS stations continue to operate in the 1910-1930 MHz band after reallocation of it to MDS Channels 1, 2 and 2A, some procedure for relocating incumbent FMS licensees must be available. Ad Hoc believes that the procedures for that band set forth in Rules 101.69, 101.71, 101.73, 101.75 and 101.77 are fair to both the FMS incumbents and unlicensed

⁵⁵ 26 U.S.C. § 168(c), (e)(3)(B)(iv), & (i)(2)(A).

PCS operators, and will provide a similarly fair and effective relocation platform for MDS channel 1, 2 and 2A operations in the 1910-1930 MHz band.

VII. <u>CONCLUSION</u>

For the reasons stated above, if the Commission decides to reallocate MDS channels 1, 2 and 2A to accommodate advanced wireless services, it should relocate those MDS channels to the 1910-1930 MHz band on an exclusive basis. Ad Hoc firmly believes that a fast, efficient, economically viable and orderly transition can be accomplished by the adoption of the following measures: (1) immediately issuing (after the decision to reallocate) licenses for the 1910-1930 MHz band to current MDS licensees, (2) granting MDS channel 1, 2 and 2A licensees the flexible use authority granted to MDS and ITFS licensees in the 2500-2690 MHz band, (3) allowing MDS channel 1, 2 and 2A licensees to retain both their existing 2150-2162 MHz licenses and their replacement 1910-1930 MHz licenses during a transition period, (4) allowing MDS channel 1, 2 and 2A licensees to operate on both sets of frequencies during the transition period, and (5) freezing new and expanded unlicensed PCS uses of the 1910-1930 MHz band while decisions on these issues are considered. Ad Hoc is convinced that, as a result of these actions, consumers will not suffer service dislocations, the cost of the transition to broadband service providers will

be reduced, auction winners of the advanced wireless spectrum will be able to commence providing services more rapidly, and our National interest will be served.

Respectfully submitted,

THE AD HOC MDS ALLIANCE

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October 22, 2001 DC01/368658.3

CERTIFICATE OF SERVICE

I, Jennifer L. Roy, a secretary in the law firm of Gardner, Carton & Douglas, certify that I have this 22nd day of October, 2001, caused to be sent by first-class U.S. mail, postage-prepaid, a copy of the foregoing Comments of the Ad Hoc Alliance on the Further Notice of Proposed Rule Making to the following:

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